

LETTERS TO THE EDITOR

Punchbag machine injuries in a nightclub

EDITOR,—Working in accident and emergency (A&E), we are used to patients presenting with injuries sustained during punching. Some of these injuries are sustained by people while in nightclubs, and almost invariably the "punch" is not welcomed by the nightclub management. We wish to highlight the case of a 17 year old youth who sustained punch injuries in a Cornish nightclub, but whose punching was encouraged by the management! Having put money into a newly introduced coin operated punchbag machine, he punched the bag three times with his right fist and once with his left, then felt pain in both wrists. During his attendance at A&E the following day, clinical suspicion of scaphoid fractures was confirmed radiologically: he had obvious bilateral fractures through the waists of both scaphoids. With the patient's permission, we reported the injuries back to the nightclub management, who have taken the machine out of action, while they "investigate" and consider if and how they can make it safer. We are aware of anecdotal reports of injuries sustained while punching these machines elsewhere in the United Kingdom. Clearly, in the setting of a nightclub, the combination of alcohol and peer group pressure may conspire to produce significant injuries. Owners of nightclubs need to be aware of the risks of their machines, so that they can take measures to reduce these risks.

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Does intraosseous have to mean intramedullary?

EDITOR,—Further to Foëx's historical note on the intraosseous route for fluid administration¹ and Lavis's recommendations regarding its use in extreme circumstances in adults,² we would like to mention our previously reported experience where use of an intracalcaneal infusion proved very successful in the resuscitation of a seriously ill child.³ In our opinion, this case questions the assumption that it is necessary to have a functioning medullary cavity in the bone where an intraosseous needle is used. Could it just be that a bone is a well defined container that provides an easier target than a vein for a needle in the haemodynamically shutdown patient, and that once the intraosseous pressure is increased by fluid infusion, the pressure is lowered by squeezing the fluid into the circulation via emissary veins?

Many haemodynamically shutdown trauma patients are at high risk of having sustained major pelvic trauma. This reduces the certainty of access to an intact venous circulation via lower limb or pelvic intraosseous routes. If it were to be shown to be the case that penetration of bones other than those with functioning medullary cavities facilitates fluid resuscitation, it raises the possibility of using relatively easily accessible proximal sites, such as the radial styloid or greater tuberosity, in extreme circumstances—more research needed?

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- 1 Foëx BA. Discovery of the intraosseous route for fluid administration. *J Accid Emerg Med* 2000; 17:136-7.
- 2 Lavis M. Pre-hospital adult intraosseous infusion. *Pre-hospital Immediate Care* 1999;3:89-92.
- 3 McCarthy G, Buss P. The calcaneum as a site for intraosseous infusion. *J Accid Emerg Med* 1998; 15:421.

The author's reply

McCarthy and Buss raise an interesting point. The essential premise for intraosseous infusion is a functioning medullary cavity. Tocantins *et al* commented "In infants under 3 years of age the marrow cavity of the sternum is not large enough to permit its use for the purpose."¹ They also described an adult patient in whom the intramedullary infusion was unsuccessful. At necropsy the sternal marrow was found to be unusually dense. To them an adequate medullary cavity appeared essential. The experience of McCarthy and Buss with an intracalcaneal route suggested otherwise.²

The problem of an intact venous circulation from the lower limb after a significant pelvic injury may necessitate use of the upper limb. Tocantins and O'Neill investigated the use of the humerus. In one of their 1941 papers they included a photograph of a newborn infant in whom mercury was injected into the lower humeri (and upper ends of the tibias).³ This clearly shows the metal passing through the emissary veins and into the general circulation. The humerus would seem to be an alternative to the upper tibia or lower femur.

While the radial styloid is very accessible and safe, and may yet prove to be effective, if the circumstances are so extreme why not use the proven sternal route? If alternative sites are to be used the more research is needed.

B FOËX

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- 1 Tocantins L, O'Neill J, Jones H. Infusions of blood and other fluids via the bone marrow. Application in pediatrics. *JAMA* 1941;117:1229-34.
- 2 McCarthy G, Buss P. The calcaneum as a site for intraosseous infusion. *J Accid Emerg Med* 1998; 15:421.
- 3 Tocantins L, O'Neill J. Infusions of blood and other fluids into the general circulation via the bone marrow. *Surg Gynecol Obstet* 1941;73: 281-7.

BOOK REVIEW

Emergency Medicine, Concepts and Clinical Practice. 4th Edition on CD-ROM. By P Rosen and R Barkin. (£199.75.) Mosby, November 1998. ISBN 0-323-00462-8.

Rosen's *Emergency Medicine* is the gold standard against which other textbooks in our specialty are compared. The current weighty and authoritative three volume, 3000 page text is now available as a single CD-ROM. The disk also contains three other Mosby products supplying prescribing information, drug interaction data, and patient handouts for prescribed drugs. These, however, will be of little interest to a UK audience.

Most readers will be familiar with the excellence of the content and comprehensive coverage provided by the printed text. It is particularly worth noting that this is the fourth edition of the text in the space of 16 years. This demonstrates not only the rapidly expanding nature of the specialty but a commitment by the editors to provide the clinician with up to date and relevant information. It is also noteworthy that this is a text written entirely by emergency physicians for emergency physicians. There are of course portions of the text that are specific to American practice but these do not detract from its value to a UK readership.

In this review I will largely deal with the way that the printed version has been translated into electronic format. Requirements for installation onto a PC are for a 486 running Windows 3.1 (or a more recent version) with 16 MB RAM and a minimum of 30 MB of hard disk space. Full installation to allow use of the program without the CD in the computer requires 150 MB of hard disk space. The electronic text runs within the internet browser Netscape Navigator (a copy of which is supplied). Installation was accomplished without problems in less than five minutes.

The browser allows the reader rapid access to the required information via hypertext links and the browser's search capability. All diagrams and illustrations are present as thumbnails, which can be enlarged and printed with excellent definition. Other functions allow regularly visited parts of the text to be saved and accessed rapidly. Text can also be copied to other Windows applications.

My only criticism is that the text box within the browser occupies less than half the screen, resulting in the need to scroll the text repeatedly or jump to and from figures and illustrations. This is, however, a minor problem. The printed version of *Emergency Medicine* is physically cumbersome but this CD-ROM makes the text accessible to the emergency physician on the "shop floor". I would therefore recommend the CD-ROM as being essential to any accident and emergency department's electronic library.

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